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ABSTRACT

Examining the differences in affective outcomes of economically advantaged and disadvantaged 6th grade students attending a 5-day residential outdoor education program in the Toledo Ohio Public Schools, pre- and post-tests were administered to randomly selected samples of 25 advantaged males and females and 25 disadvantaged males and females. Additionally, a literature review was conducted re: compensatory education, selected aspects of economically disadvantaged children, and outdoor education. The instruments used were: the Nowicki-Strickland Locus of Control (measurement of the internal-external dimensions); the All About Myself Scale (self-evaluation); and a pre- and post-camp questionnaire developed by the Toledo Public Schools Office of Evaluation. Findings indicated: although the disadvantaged students had a more external locus of control (life is dictated by fate), the 5-day program caused both groups to become more self-reliant and self-confident; all students had moderately improved in cooperation with others; there was only a moderate transfer of positive values to the classroom; the majority of students liked camp, wanted to return, wished they could have stayed longer, and felt they had made new friends; and the Nowicki-Strickland Locus of Control appeared more valuable than either of the other two instruments. (JC)

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A COMPARISON OF AFFECTIVE CHANGES BETWEEN ECONOMICALLY DISADVANTAGED AND ADVANTAGED SIXTH GRADERS AT A RESIDENT OUTDOOR EDUCATION PROGRAM

BY

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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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A special thanks goes to the Rillo family for their warm and genuine hospitality during several of my working visits to Bloomington.

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S.A.F.

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TO GEORGE

WHOSE LOVE HAS ADDED

A NEW DIMENSION TO MY LIFE

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CHAPTER I

INTRODUCTION

Statement of the Problem

This research analyzed the differences in self-reliance, ability to cooperate in a group, and the transfer of positive values back to the classroom between economically disadvantaged and non-disadvantaged sixth grade students attending the five-day resident outdoor education program of the Toledo Public Schools during the spring of 1973.

The problem was divided into the following sub-problems:

1. To isolate a population of disadvantaged and non-disadvantaged sixth graders attending the five-day resident outdoor education program of the Toledo Public Schools.

2. To determine differences in outcomes between disadvantaged and non-disadvantaged students who attend the resident outdoor education program of the Toledo Public Schools with regard to self-reliance, ability to cooperate in a group, and the transfer of positive affective values back to the classroom.

3. To organize and to analyze the data including the aspects of self-reliance, ability to cooperate in a group, and the transfer of positive affective values back to the classroom.

Purpose of the Study

The purpose of this study was to ascertain if there was a difference in the affective outcomes of economically disadvantaged students

as compared to non-disadvantaged students who attended a five-day residential outdoor education program, and if so, in which areas and to what degree these differences occur. Such findings may be useful in decisions on funding future compensatory education programs such as the one selected for the study.

Need for the Study

The concept of compensatory education is presently under scrutiny. Many cities throughout the country have attempted to "compensate" by adding special programs, additional staff, and more educational materials to schools in economically disadvantaged areas. Yet additional funds don't always seem to solve the existing educational problems. In the summary of the massive and well-known study, Equality of Educational Opportunity, the authors state:

> Whatever may be the combination of nonschool factors -- poverty, community attitudes, low education level of parents -- which put minority children at a disadvantage in verbal and nonverbal skills when they enter the first grade, the fact is the schools have not overcome it.[1]

Toledo Public Schools have several programs that are financed through local, state, and federal funds to serve children of low income families. The basic premise underlying all these programs is that additional money will help to raise the achievement level of the disadvantaged child, or at least lessen the gap between achievement levels of

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[1] Coleman, James, and others, Equality of Educational Opportunity, p. 21.

these two groups. This premise has rarely, if ever, been tested.

Most sixth graders from the Toledo Public Schools attend the resident outdoor education program at the YMCA Storer Camps located in Napoleon, Michigan once during the school year for one school week (Monday morning through Friday afternoon). This is a format commonly followed in many resident outdoor education programs throughout the country. Usually the classroom teacher attends camp with her class. Each week three or four classes come to the program at Camp Storer. The Toledo program operates from September through May. Some of the schools sending students are classified as "DPPF schools", meaning that they are eligible for state funds from the Disadvantaged Pupils Public Fund. This source of state funds is available to schools which meet the criteria of either 1) 14.28 per cent low income families, or 2) an average of 161 low income families in the school attendance area.[2] The term "low income family" refers to those families that can qualify for Aid to Dependent Children funds in the state of Ohio.

There is a lack of research in the area of camping and outdoor education for disadvantaged youth. In the foreword of the pamphlet by Catharine Richards "the relative absence of research and other definitive studies on camping" is noted along with the fact that camping "offers tremendous opportunities for new experiences and enriched living to children and youth from low-income families."[3]

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[2] Application for Federal Assistance for the Education of Children from Low-Income Families, Fiscal Year 1973, Toledo Public Schools, (Appendix A).

[3] Richards, C. V., Good Camping for Children and Youth of Low-Income Families, Foreword.

In A Position Paper: Research Utilization in Outdoor Education, George Donaldson comments:

> The last few years have witnessed a substantial movement of outdoor education into the inner city, largely the result of Federal activity. Other new programs also owe their beginnings to Federal funding. Little published research has come from either source, and no general evaluation of these projects has yet been published.[4]

Donaldson concludes with a list of research needs in the area of outdoor learning experiences including:

> . . . Studies which clearly distinguish between cognitive and affective domains . . . Studies specifically focusing on the individual growth of the learner, especially in his self-concept . . . Studies to determine the unique needs of inner-city children and youths with respect to outdoor education . . .[5]

Clifford Knapp points out a more generalized research need:

> The majority of the research in outdoor education has focused upon descriptive surveys and historical studies. More empirical research is needed in order to solidify a place for outdoor education in the curriculum.[6]

Hammerman and Hammerman, in an overview of research in outdoor education to date noted:

> The future growth and development of outdoor education will depend upon the willingness and the ability of professors,

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[4]Donaldson, G. W., A Position Paper: Research Utilization in Outdoor Education, p. 5.

[5]Ibid., p. 6.

[6]Knapp, Clifford, "Some Challenges in Outdoor Education", Perspectives on Outdoor Education -- Readings, p. 117.

administrators, teachers, and resource people in the field to support or refute the many positive goals they 'feel' are being reached through learning experiences in the outdoor environment.[7]

In summarizing his research on camping and self-concept, Frank Raymond wrote:

> There are many important factors which can influence the extent of a positive camping experience, one that enables growth. This study found that the camper himself is one of the most important, yet often overlooked, variables of influential camping . . . Other dimensions related to the influence of camping upon children are an open area for experimentally conducted research. It is vitally needed and should be strongly encouraged.[8]

Delimitations of the Study

The study was subject to the following delimitations:

1. To the collection of data regarding affective changes in the students involved as measured by the Nowicki-Strickland Locus of Control, the All About Myself Scale, and the pre and post camp questionnaires.

2. To the randomly selected students from the two contrast groups; economically disadvantaged and non-disadvantaged sixth graders in the Lincoln, Glann, and Larchmont elementary schools in Toledo, Ohio.

3. To the time period encompassing the three weeks before the camp experience, the five-day resident outdoor education program, and the two weeks afterwards in the classroom.

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[7] Hammerman, D. R. and Hammerman, W. M., Outdoor Education — A Book of Readings, p. 337.

[8] Raymond, F. R., "Camping and Self-Concept", Camping Magazine, 41:19, May, 1969.

Limitations of the Study

This study was subject to the following limitation:

1. The ability of the selected instruments to measure affective changes that do occur from the relatively short length of time the students attend the resident outdoor education program.

Basic Assumptions of the Study

The following assumptions were basic to this study;

1. It was assumed that students in the same elementary school attendance area were from basically similar socio-economic backgrounds. All of the students in the study from Lincoln Elementary School were considered "economically disadvantaged" because the school had been designated by the state of Ohio to receive D.P.P.F. funds. It was assumed that there was an insignificant difference between students from Lincoln School whose families actually received Aid to Dependent Children funds and those students from Lincoln School whose families did not receive these funds.

2. The students received essentially the same program and environment each week of the resident outdoor education program.

Definition of Terms

Affective: This term refers to that characteristic of consciousness which belongs to a state of feeling.[9]

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[9]Monroe, Paul, editor, A Cyclopedia of Education, p. 54.

Organized Camping: This term refers to an organized experience in an outdoor environment, under trained leadership, which offers campers an opportunity for growth, development, and happiness, through a program of activities related to the natural surroundings.[10]

Economically Disadvantaged: This term refers operationally in this study to the student who attends a school in Toledo in which either 1) 14.28 per cent of the families qualify for Aid to Dependent Children funds from the state of Ohio, or 2) there is an average of 161 low income families in the school attendance area.[11]

Locus of Control: This term refers to the generalized expectancy individuals have on the level of control they maintain over the things that happen to them.[12]

a) Internal Control: This term refers to the extent to which a person believes that he can control what happens to him.[13]

b) External Control: This term refers to a belief that one is controlled by luck, fate, or powerful others.[14]

Resident Outdoor Education: This term refers to the situation in which a teacher and his pupils leave the school room to live for a week in an outdoor setting while carrying out a program of learning activities

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[10]Gabrielsen, M. A., and Holtzer, Charles, The Role of Outdoor Education, p. 12.

[11]See Appendix A.

[12]Nowicki, Stephen, Jr., and Barnes, Jarvis, Evaluation of the Camp Project for Seventh, Eighth, and Ninth Grade Pupils, p. 6.

[13]Rotter, J. B., Clinical Psychology, p. 61.

[14]Ibid., p. 61.

related to the school curriculum. This is also referred to as school camping in some of the literature.[15]

Outdoor Education Programs: The program consists of a series of complete activities centering around 1) the natural living situations that occur, and 2) the best use of the camp environment for learning activities that grow out of the children's interest and the on-going school curriculum.[16]

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[15] Hammerman, D. R. and Hammerman, W. M., Teaching in the Outdoors, p. 10.

[16] Smith, Julian and others, Outdoor Education, p. 116.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

In searching for appropriate literature to review, the author checked the following sources of information. The Educational Resources Information Center (ERIC) includes materials carried by Research in Education and Current Index to Journals in Education. An ERIC "probe" was run through the Educational Testing Service in Princeton, New Jersey using the descriptors "self-concept", "children", "personal adjustment", and "behavior tests". DATRIX, a computerized search system available through Xerox University Microfilms in Ann Arbor, Michigan, was used with the key words "disadvantaged", "environment", "nature", and "education". This search covered the humanities data base for Dissertation Abstracts International issues 1/1 through 30/6 (1938-1970). The DATRIX system did not locate any sources, indicating both the decided lack of studies in this area as well as the difficulty in selecting appropriate key words from the list allowed.

Both the card catalogue and the Readers' Guide to Periodical Literature were reviewed for journals and articles related in content and method to the topic. Camping Magazine and the Journal of Outdoor Education appeared to be the most useful.

Dissertation Abstracts International Index was used to locate several research studies. The volumes on Education were checked for studies on the disadvantaged, self-concept, and outdoor programs. The volume on Psychology/ Sociology/ Political Science was reviewed for

research pertaining to locus of control.

The bibliographies of the pertinent studies were then reviewed to locate other useful literature. And finally, handbooks and written materials developed for the Toledo outdoor education program were also considered.

Material Related in Content

The material related in content included information on compensatory education, aspects of disadvantaged children, and outdoor education.

The idea that programs for the disadvantaged should be funded only on the basis of sound research is supported by the Committee for Economic Development.

> The schools must be held accountable for their product. Special educational programs for the disadvantaged should be funded only where evaluations have been designed to identify concrete results and the conditions necessary for achieving those results.[17]

Ginsburg wrote that disadvantaged students may need special types of study for the most realistic results.

> Research on poor children cannot be based exclusively -- or perhaps at all -- on standard tests given in school. To assess poor children's competence, it is necessary to investigate their behavior outside the school.[18]

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[17] Committee for Economic Development, Education for the Urban Disadvantaged, p. 61.

[18] Ginsburg, Herbert, The Myth of the Deprived Child, p. 93.

Toledo Public Schools are using large amounts of state funds, such as the Disadvantaged Pupils Public Funds mentioned earlier, to help support special compensatory programs for urban schools. According to the Committee for Economic Development, these programs are more costly for disadvantaged children.

> The cities must provide massive educational services in order to place their disadvantaged children on par with more advantaged suburban peers. All the special programs for the disadvantaged mentioned in this statement tend to be more costly than programs ordinarily required for other children.[19]

The economically disadvantaged child is hindered at school in a variety of ways, including lower self-image, lower motivation levels, and a higher chance of doing poorly in academic achievement. McMurrin writes of the problem of lower self-image:

> Experienced observers have noted that minority students often perceive themselves as less capable than members of the white majority. The result is poor motivation or, as is more likely, lower expectations. Regardless of the precise causes, the effects are clear; students from the racial minorities enter school at a deficit and fall farther and farther behind their Caucasian contemporaries.[20]

Education for the Urban Disadvantaged also notes:

> The children of the poor . . . are far less likely to lack innate ability to learn than they are to lack motivation because of environmental factors. Regardless of ethnic background, middle class children do better in schools than their disadvantaged peers.[21]

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[19] Committee for Economic Development, op. cit., p. 68.

[20] McMurrin, S. M., editor, The Conditions for Educational Equality, p. 123.

[21] Committee for Economic Development, op. cit., p. 16.

Despite the efforts of school officials to narrow the differences in the experiential background of students, McMurrin notes that "variations in school account for much less variation in achievement than do variations in home background."[22]

The Committee for Economic Development adds:

> Even though increased funding is in itself no guarantee of more effective schooling for the disadvantaged, without adequate funding schools with disadvantaged children have little hope of establishing programs that can be effective.[23]

An experience-based curriculum is urged for schools working with disadvantaged students. There is a "need to make a connection between the affective or feeling aspects and the cognitive or conceptualizing aspects of the learner."[24]

It is this very aspect of outdoor education, that of learning through tangible experiences, that many writers claim as a strength of outdoor education. In a summation of the history of outdoor education, Julian W. Smith enumerated the current outcomes of outdoor education.

> The reaches of outdoor education are encompassed in the basic objectives of education and are made possible through direct and concrete experiences which fall in the cognitive, affective, and motor performance domains of education. Outdoor education may well make its unique contributions to the affective domain . . . behavior changes.[25]

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[22] McMurrin, op. cit., p. 110.

[23] Committee for Economic Development, op. cit., p. 69.

[24] McMurrin, op. cit., p. 99.

[25] Smith, J. W., "Where We Have Been . . . What We Are . . . What We Will Become", Journal of Outdoor Education, 5:7, Fall, 1970.

Groups other than elementary children have noted the social benefits from various types of outdoor education programs. Prospective secondary teachers at Brigham Young University being certified through the unique and demanding I-Step Program agreed that the experience aided them in self-understanding and in interpersonal situations.[26] A majority of parents of the students attending resident outdoor education programs at Rockford, Illinois and at the Lorado Taft Field Campus of Northern Illinois University felt that their children had increased in self-confidence because of the resident experience.[27]

As the Coordinator of Outdoor Education and Recreation in the State Education Department of New York, Irwin Rosenstein wrote of his predictions of the future changes in education. He relates these changes to disadvantaged and urban children.

> Another aspect of the changing times in education will be the extensive attempt to provide compensatory, remedial and enrichment experiences to assist educationally disadvantaged children. These children usually experience failure and disappointment, not only in school, but also socially and in their relationships with other children and adults. The outcome is that these children have a negative concept of themselves and the opportunities which life affords them. A review of the literature dealing with disadvantaged children shows that some of their positive characteristics make them "naturals" for outdoor education. They are usually (1) physically oriented, (2) inductive, (3) problem oriented, (4) visually artistic, (5) expressive and (6) persevering. In attempting to meet the

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[26] Harmon, Frank, "Camping in Teacher Education", Journal of Outdoor Education, 6: 13-16, Winter, 1972.

[27] Jones, O. E., and Swan, M. D. Jr., "Parents' Perceptions of Resident Outdoor Education, Rockford Outdoor School and Taft Campus, Illinois, A Comparison, Spring, 1971", Journal of Outdoor Education, 6:17-20, Winter, 1972.

needs of these children it is necessary to provide educational experiences which will make the most of these attributes. I believe that outdoor education will be one of the learning processes that will receive major emphasis in contributing to the solution of this problem. Use of the outdoors can provide a learning environment which eliminates many of the negative factors of traditional schooling. Through informal, relaxed, and non-competitive learning conditions students will have a greater opportunity to develop desirable attitudes, skills, and knowledge.

Closely associated with the education of disadvantaged children is the education of children in urban school districts. Social and educational problems in these urban communities have caused educators to look for innovative approaches to the learning process. The traditional curriculum of urban schools are, in most instances, not effective in meeting the needs of these children. I think outdoor education will be incorporated into the curriculum of urban schools to a greater degree than ever before because educators are now realizing that these types of experiences can stimulate interest in learning and can bring about feelings of personal worth, positive attitudes, and social and cultural enrichment.[28]

[28] Rosenstein, Irvin, "Perspective: A State Education Department Consultant Looks at Outdoor Education", Journal of Outdoor Education, 5:9-10, Fall, 1970.

Material Related in Method

The principal testing instruments to be used in this study evaluate self-concept and locus of control.

Self-Concept:

The five most pertinent studies dealing with the self-concept of youth in a camping or outdoor education environment are Beker (1960),[29] Stack (1960),[30] Davidson (1965),[31] Raymond (1969),[32] and Warder and Bishop (1972).[33] Each of these studies indicated some type of more positive self-concept emerging in youth after the experimental research study at camp.

Jerome Beker used a self-concept check list and the Classroom Social Distance Scale to evaluate emotional and social growth of 13 school classes of sixth graders participating in five-day school camping programs as part of their regular school curriculum. Four classes that did not attend the camp were used as control subjects. Campers and

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[29]Beker, Jerome, "The Influence of School Camping on the Self-Concepts and Social Relationships of Sixth Grade School Children", Journal of Educational Psychology, 51:352-356, 1960.

[30]Stack, G. C., "An Evaluation of Attitudinal Outcomes of Fifth and Sixth Grade Students Following a Period of School Camping", Dissertation Abstracts, 21:305, 1960.

[31]Davidson, Morris, Changes in Self-Concepts and Sociometric Status of Fifth and Sixth Grade Students As a Result of Two Different Camp Curricula, Doctoral Dissertation, University of California (Berkeley), 1965.

[32]Raymond, Frank, "Camping and Self-Concept", Camping Magazine, 41:18-19, May, 1969.

[33]Warder, D. S., and Bishop, D. W., Self-Concepts and Activity Preference of Participants of Seven Organized Summer Outdoor Residential Camps, Leisure Behavior Research Laboratory, University of Illinois, Report No. 72-1, 1972, 52 pp.

adult observers rated the "social climate" during each week at camp. The rank order ratings correlated closely between adults and students. There were significant positive changes in self-concepts shown by the campers as compared to the control subjects. Surprisingly, these differences were even greater after a lapse of 10 weeks.[34]

In 1960, Genevieve Stack investigated attitudes toward concepts of classmates, school teacher, school camping, self, and friends held by fifth and sixth grade students prior and subsequent to a one-week resident outdoor education experience. The 88 students were from a lower-middle socio-economic background. Among her conclusions, Stack noted that there were several positive changes from the school camping program, including "greater freedom of choice of companions", "new friendships formed", and "strengthening rapport between teachers and students". She also noted that "school camping provided unique opportunities for effecting social change, particularly in relationship to racial cleavage."[35]

In 1966, Davidson measured changes in children's self-concepts and social relationships comparing two different school camp curricula. Encampment I (adult-centered) featured fixed schedules, inflexible programming, constrictive adult guidance, and a minimum of group interaction. Encampment II (child-centered) encouraged individual initiative, group interaction, self-government, flexible programming, and a minimum of adult interference. Each of the 60 fifth and sixth grade students was

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[34] Beker, Jerome, op. cit., pp. 352-356.

[35] Stack, G. D., op. cit., p. 305.

administered a self-concept list just prior to camp and again on the last day of camp.

Davidson writes:

> School camping, even for so short a time as eight days, does produce changes. These changes appear to be in a positive direction, but these positive changes do not tend to remain stable over a long period of time. Gains made in both encampments showed signs of deterioration after sixteen weeks.[36]

Campers in both encampments made positive gains in self-concept, but each on different items, with no overlap in the items. Davidson concluded that one philosophically-oriented encampment was not necessarily better or worse than the other.

Frank Raymond also investigated the influence of camping on self-concept. In contrast to the studies mentioned earlier, Raymond looked at underprivileged children in a summer camp. The Self-Concept Scale for Children was administered to 577 children, aged 9 to 12, at the beginning of the camping session and again on the last day of camp.

> Results consistently demonstrated that there were marked positive effects of camp upon the campers and how they felt about themselves. It was found that a selectively controlled camp environment has characteristics for catalyzing possible self-concept change. Usefulness of the camping experiences in altering children's self perceptions through planned social relationships was validated . . .
>
> There was a very significant difference found related to self-concept level. Individual children who initially had the lowest self-concepts were influenced much more by the camping experience than either middle- or high-self-concept children, even though these did display some positive shift in self-concept.[37]

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[36] Davidson, Morris, op. cit., p. 108.

[37] Raymond, Frank, op. cit., p. 18.

In 1972, Don Warder and Doyle Bishop studied self-concepts and activity preferences of economically disadvantaged and non-disadvantaged youth in summer camps. The seven- to fifteen-year old participants were tested at the beginning and at the end of the camp sessions. One-week and two-week camp sessions were compared to determine which would bring about the greatest increase in self-concept and activity preference.

> In comparing the two groups, the more advantaged campers increased in self-concept and two types of activities more than the less advantaged campers. Contrary to other studies, the self-concepts of disadvantaged children were not significantly increased as a result of camp experiences when compared to more advantaged campers. Differences were found between camps for disadvantaged campers on part of the measure of self-concept (self ideal concept); however, no order was observable supporting a specific percentage ratio of disadvantaged to advantaged campers. The two-week camp programs did provide a greater increase in self-concept and two types of activity preference for advantaged campers; however, neither group increased their preference for activities which would have taken them away from their home neighborhoods.[38]

Koppitz found that as a child learns to think of himself as worthy of love and consideration because others treat him with affection and respect, he will then feel friendly and loving toward others. If, however, the child perceives himself as being inferior or not worthy of love because he has been treated with rejection and punishment, he will then tend to have a higher degree of hostility and rejection toward others and will generally consider them just as undeserving of love as he considers himself.[39] Harris aptly summed this attitude as "I'm not

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[38] Warder, D. S., and Bishop, D. W., op. cit., Abstract.

[39] Koppitz, Elizabeth, "Relationships Between Some Background Factors and Children's Interpersonal Attitude:, Journal of Genetic Psychology, 91:119-129, 1967.

OK, you're not OK".[40]

If it is true, as the previous authors have discussed, that a child's self-concept is based upon the reactions of others who are important to him, then the outdoor education experience may provide the child with approval and other reinforcements for certain actions and thereby affect his self-concept.

Locus of Control:

The ways in which a child seeks to understand his world are intimately tied to how he "expects" events to occur. The world would be an unsettling and chaotic place without this subjective expectation. In discussing social learning theory, Rotter explains the generalized expectancy concept.

> For example, the extent to which a person believes that he can control what happens to him is referred to as a belief in internal control of reinforcement. A belief that one is controlled by luck, fate, or powerful others is referred to as a belief in external control of reinforcement. Such generalized expectancies may have important consequences for how the individual responds to different kinds of therapy, how he responds to prolonged periods of stress, and other social behaviors.[41]

This locus of control concept has been used in a great variety of studies. A few studies related in method will be considered here. Rothenberg investigated locus of control in relation to social class and

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[40] Harris, T. A., I'm OK, You're OK, p. 69.

[41] Rotter, J. B., Clinical Psychology, p. 61.

risk-taking in 106 fifth-grade Negro boys.[42] Villa-Boas studied the motivational role of self-concept and locus of control in creative children, concluding that creative children, regardless of their achievement level have less self-concept via social competence than non-creative children.[43] Rosen's dissertation analyzed the behavior patterns of gratification in children aged eight to 11, finding that risk-taking behavior was related to internal locus of control.[44]

Lois Allen explored the relationship between locus of control and such factors as intelligence, race, sex, socio-economic level, modeling or identification with parents, and parental attitudes as viewed by 376 third through sixth grade school children. She found that 1) control orientation and intelligence are only minimally related; 2) control orientation tends to remain stable across success and failure situations; 3) complicated interaction effects of all the cultural factors, race, sex, and socio-economic level have an important influence in the development of locus of control; and 4) parent-child interactions and the climate provided by parental attitudes may be a significant source in the determination of control orientation in the child.[45]

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[42]Rothenberg, P. J., "Locus of Control, Social Class and Risk-Taking in Negro Boys", Dissertation Abstracts, 29B: 379-B, 1968.

[43]Villa-Boas, M. C., "A Study of the Motivational Role of Self-Concept and Locus of Control in Creative Children", Dissertation Abstracts, 29B: 400-B, 1968.

[44]Rosen, B. E., "Gratification Patterns and the Perception of Locus of Control in Young Children", Dissertation Abstracts, 29B: 4853-B, 1969.

[45]Allen, L. J., "A Study of Some Possible Origins and Sources of Internal-External Control Orientation in Children", Dissertation Abstracts, 32B: 2390-B - 2391-B, 1971.

Wickersham's investigation sought to determine whether a pattern of teacher behavior that tended to restrict or expand children's freedom to interact in the classroom affected sixth-grade children's self-concept and locus of control of reinforcements. Evidence was also sought of a relationship between children's self-concepts and locus of control. Using the interaction analysis technique of observation, Wickersham designated selected teachers as direct or indirect. One hundred ninety-eight sixth-graders were given tests on self-concept and locus of control at the beginning and end of the school year. It was found that children under direct teachers had significantly higher self-concepts on two of the five factors of the self-concept instrument. Significant sex differences were found. Girls had significantly higher self-concepts than boys on two of the self-concept factors, while boys indicated significantly more internality of control for positive occurrences in their lives than girls. Children under direct teachers were significantly more likely to assume responsibility for negative occurrences in their lives than children under indirect teachers. Significant negative correlations were generally found between self-concept and internality of control for positive events.[46]

In an excellent article summarizing several studies on locus of control, MacDonald wrote:

> Several studies have linked locus of control to race and socioeconomic status. Blacks have been found to be more external than whites (Ladwig, 1965, 1966; Owens, 1969; Zytoskee, Strickland

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[46] Wickersham, P. H., "Classroom Interaction Patterns: Differential Effects and Relationships Between Sixth-Grade Children's Self-Concepts and Locus of Control of Reinforcements", Dissertation Abstracts, 32A:804-A, 1971.

and Watson, 1969). Furthermore, Battle and Rotter (1963) demonstrated that lower-class Negro children were significantly more external than lower-class whites or middle class Negroes and whites, and Shaw and Uhl (1969) found Negroes to be more external than whites within an upper-middle class sample of elementary school children.

Other studies have looked at the relationship between control orientation differences and social class alone. Several investigations have revealed that children from low socioeconomic levels have higher external scores than children from higher social class levels (Battle and Rotter, 1963; Crandall, Katkovsky, and Crandall, 1965; Shaw and Uhl, 1969).[47]

It is generally concluded then that poorer people have a pervasive feeling of powerlessness which affects their social behavior.

Two studies using the Nowicki-Strickland Locus of Control instrument and most closely allied to this study were conducted in the Atlanta Public Schools. A seven-week program was conducted for seventh, eighth, and ninth graders from Atlanta Title I schools. The children attended a five-and-a-half day outdoor education experience during the summer of 1970. Students were given the Nowicki-Strickland Locus of Control test on the first day of camp and again on the last day. The analysis showed that the pupils did become significantly more internal from the camping experience, that is, they felt more in control of events occuring to them and more confident in themselves. A few students who were allowed to return for a second week at camp made the most significant gains of all.[48]

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[47] MacDonald, A. P. Jr., "Internal-External Locus of Control: A Promising Rehabilitation Variable", Journal of Counseling Psychology, 18:112, 1971.

[48] Nowicki, Stephen, Jr., and Barnes, Jarvis, Evaluation of the Camp Project for Seventh, Eighth, and Ninth Grade Pupils, Atlanta Public Schools, Research and Development Report, Vol. 4, No. 9, 1970.

> The finding that internals were more popular added to the validity of the Nowicki-Strickland measure and its applicability to a predominately black population, as well as to favorability of being internal as opposed to being external. This is evidence of improvement in the realm of inter-personal relationships as well as self-confidence and feelings of control due to the camp experience.
>
> From the analysis of the results of this project, it is concluded that the primary objectives of the Atlanta camping project were met. Inner-city youngsters, even at the teenage years, when exposed to this fairly rigorous, educationally oriented camp experience became more responsible, improved their self-concept, and gained in self-respect.[49]

During the summer of 1972, Title I physically and mentally handicapped children attended camp for a period of approximately four days. Each handicapped student was paired with a "tutor-buddy" who was not handicapped. The Nowicki-Strickland Locus of Control Scale was administered to the students at the beginning and the end of each camping session. While no significant changes in locus of control were noted for the students attending the brief four-day camping period, a significant change was observed for students who attended for two or more camp sessions. The conclusion was made that a two-week period of camp was needed for a change to be affected in the area of locus of control.[50]

Summary

The review of literature related to content included information on compensatory education, selected aspects of economically disadvantaged children, and outdoor education. Compensatory education is

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[49] Nowicki, Stephen, Jr., and Barnes, Jarvis, Ibid., p. 11.

[50] Kopp, F. S., Evaluation of the Camp Project for the Handicapped, 40 pp.

necessary to help raise the inner-city and disadvantaged youth to the levels of achievement of suburban students. These costly programs are also needed to improve the lower self-image and lower motivation levels of disadvantaged children. Outdoor education, with its emphasis on concrete learning experiences in the natural environment, is viewed as a particularly successful method of improving educational processes for such students.

The literature reviewed related to method included studies which evaluated self-concept and locus of control in youth in camp settings. Each of the five research studies reviewed in this area indicated a significant positive self-concept emerging in students after their stay at camp. Locus of control in children is related to parents and teachers affecting a child, as well as sex, race, and social class. Two studies using the locus of control test instrument utilized in this study concluded that the educationally oriented camp experience aided students to improve their self-respect and self-concept.

CHAPTER III

METHODS AND PROCEDURES

This research analyzed the differences in self-reliance, ability to cooperate in a group, and the transfer of positive values back to the classroom between economically disadvantaged and non-disadvantaged sixth grade students attending the five-day resident outdoor education program of the Toledo Public Schools during the spring of 1973.

For clarity, the methods and procedures are described after each sub-problem.

Sub-problem 1: To isolate a population of disadvantaged and non-disadvantaged sixth graders attending the five-day resident outdoor education program of the Toledo Public Schools.

The elementary schools participating in the Toledo outdoor education program were scheduled on a master calendar for the 1972-73 school year. The schools from which a sample was taken for the study were selected considering the per cent of children attending each school from low income families. This was determined by referring to the Application for Federal Assistance for the Education of Low-Income Families for Fiscal 1973. See Appendix A. The schools selected met the following criteria:

1. Have all sixth grades participating in the Toledo outdoor education program at Camp Storer YMCA camps.
2. Have either:
   a) more than 40 per cent children from low income families, or
   b) less than 3 per cent children from low income families.

The following three schools were selected for this study: Lincoln School with 40.37 per cent children from low income families, Glann School with 1.90 per cent, and Larchmont with 2.86 per cent children from low income families. For the purpose of this study, the students from Lincoln School will be referred to as "economically disadvantaged" and those from Glann and Larchmont as "economically non-disadvantaged" or "advantaged". Students from Glann and Larchmont attended the resident outdoor education program from March 30 - April 4, 1973. Lincoln School sent their students to camp April 2 - 6, 1973. It was felt that selecting schools that sent students to camp in the same month would help to reduce any possible effect that weather might play on the students' experience.

It should be noted from Appendix A that there were schools in the Toledo Public School System with a greater percentage of children from low income families than Lincoln School. Washington School, for example, had the highest percentage with 61.48 per cent of the children from low income families. However, Washington was involved in almost every type of compensatory education program in Toledo and had one of the highest rates of volunteer adult help including college student teachers and Teacher Corps personnel. Therefore, the schools at either extreme were eliminated from consideration. Thus, there were three schools selected out of 50 elementary schools in Toledo whose sixth graders attended the resident outdoor education program.

Toledo elementary schools generally serve students that live within walking distance of the school. It was assumed that students attending the same school came from the same general socio-economic

level, even though one individual child may have been from a family receiving Aid to Dependent Children while another child's family might not have received such funds. Also, the state of Ohio was extremely cautious about disseminating information as to which families were on welfare. Because of this, the population was selected from the sixth graders attending the schools meeting these criteria rather than selecting the individual child.

Sub-problem 2: To determine differences in outcomes between disadvantaged and non-disadvantaged students who attend the resident outdoor education program of the Toledo Public Schools with regard to self-reliance, ability to cooperate in a group, and the transfer of positive affective values back to the classroom.

Figure 1 graphically explains the 2 x 2 x 2 design of this study.

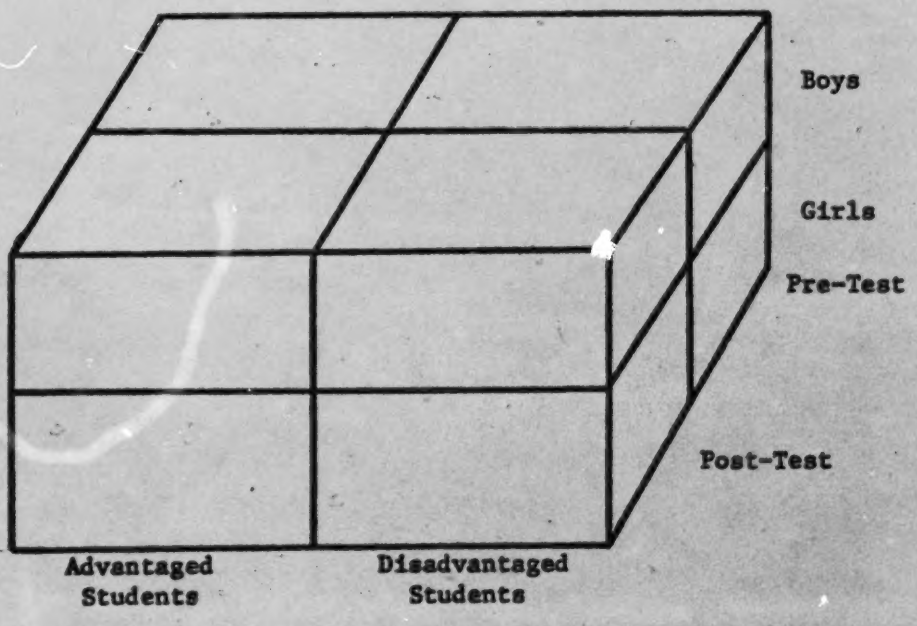

Figure 1. Design of the Study

Selection of the Test Instruments

Finding appropriate test instruments was difficult. The selection was limited to tests that met the following restrictions:

1. measured self-confidence and self-reliance;
2. were appropriate for sixth grade students;
3. were as "culture-free" as possible for economically disadvantaged and non-disadvantaged pupils;
4. were useful for groups of students with a wide range of reading abilities.

With these criteria in mind, the following three test instruments were chosen.

Nowicki-Strickland Locus of Control

To develop a measure of the internal-external dimension for use with children, Nowicki and Strickland constructed a paper and pencil 40-item forced-choice (yes-no) test for locus of control. Internal consistency (r = .71 to .88) and test-retest reliabilities (r = .69 to .82) on this [illegible] instrument have been satisfactory for both children and adolescents (n = 1,739 third through 12th grade children). In addition the scale has shown substantial construct validity.[39]

The general rather than specific nature of the Nowicki-Strickland scale was seen as an asset for use in this particular study. Few, if any, of these questions were related to the specifics of a camping situation. These were assessed with the pre and post tests using the

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[39]Nowicki, Stephen, Jr., and Barnes, Jarvis, Evaluation of the Camp Project for Seventh, Eighth, and Ninth Grade Pupils, pp. 7-8.

pupil questionnaires.

To meet the objective of self-reliance, the group mean scores on the Nowicki-Strickland Internal-External Control Scale should have moved toward the lower end of the continuum, that is, the youngsters should have become more internal after the outdoor education experience. See Appendix B.

All About Myself Scale

This instrument was used as a form of student self-evaluation of his abilities in several areas at the times the test was administered. Although the test has not been standardized in any formal manner, it has been used with slightly differing items in several studies done through the Department of Research and Development of the Atlanta Public School System in Atlanta, Georgia. One such project was the 1970 summer camp program with underpriviledged students of junior high level.[40] The Youth-Tutoring-Youth project in which underachieving black high school pupils were hired to tutor third, fourth, and fifth grade pupils in language arts also employed this test instrument.[41] In this test the child rates himself on each area of competence by circling one of five points on a scale ranging from 1 -- very little ability to 5 -- very great ability. See Appendix C. If the objectives of self-reliance and the ability to live cooperatively with others were achieved, students should

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[40] Nowicki, Stephen, Jr., and Barnes, Jarvis, Ibid.

[41] Rollins, Howard, and Barnes, Jarvis, Evaluation of the Youth-Tutoring-Youth Project, Atlanta Public Schools, Atlanta, Georgia, Research and Development Report, Vol. 4, No. 10, 1970.

have rated themselves higher in ability on each test item after the outdoor education experience.

Pre and Post Camp Questionnaires

These questionnaires were developed by the Office of Evaluation of the Toledo Public Schools, and were administered to all students attending the Toledo outdoor education program during the 1972-1973 school year. Only selected items on these tests were relevant to the three variables being studied. Items numbered 6, 7, 14, 15, 16, and 17 on the pre-camp questionnaire were used as quantitative data, as well as items 1, 2, 3, 4, 8, 10, 22, and 25 on the post-camp questionnaire. See Appendix D.

Testing Procedures

Pilot Testing:

The sixth grade classes at Navarre and Warren Elementary Schools in Toledo were used to conduct a trial run of the testing procedures. The tests were administered in a manner similar to that described in the Pre-Testing and Post-Testing sections of this chapter with careful attention paid to any suggestions for improving the testing methods. The only suggestions made for improvement were to schedule the testing at the convenience of the classroom teacher through the principal, do the testing in the morning when the students were more alert, and avoid testing just before or after a recess period. There seemed to be no difficulties with the test instruments themselves. The total testing time for the Nowicki-Strickland Locus of Control Test and the All About Myself Scale

was about 30 minutes per class.

Pre-Testing:

The Nowicki-Strickland Locus of Control Test and the All About Myself Scale were administered in each sixth grade class three weeks before the class attended the resident outdoor education program. This timing was selected to preclude the majority of pre-camp activities in class planned by the teacher. Contacts were made with the principal of each school involved a few weeks prior to the time of pre-testing so that class time could be scheduled with the classroom teachers.

Each test was administered orally, with the researcher reading each item to the class as each student recorded his answer on his own answer sheet. There were several children in these schools who were poor readers even at the sixth grade level. Consequently, reading the questions to the class helped to eliminate reading ability as a variable in student comprehension.

Similar procedures were used by the Outdoor Education staff of the Toledo Public Schools to administer the pre and post camp questionnaires.

Post-Testing:

Post-tests were administered in each sixth grade class two weeks after the class attended the resident outdoor education program. This timing allowed for the majority of follow-up activities that the teacher had planned for her class. These tests were also read aloud to the class as each student marked his answers on his own tests.

Critical Variables

The three critical variables studied were self-reliance, ability to cooperate with others, and the transfer of positive values back to the classroom. Data were also collected for background information on the students' experiences. The following items from the three test instruments were used to judge each variable:

I. Self-Reliance

1. Nowicki-Strickland Locus of Control
2. All About Myself Scale
   a) "To feel sure of myself"
   b) "To work on my own"
   c) "To have fun by myself"

II. Ability to Cooperate with Others

1. Pre-Camp Questionnaire, item: "Do you fight at school?"
2. Post-Camp Questionnaire
   a) "Did you fight at camp?"
   b) "Did you make new friends at camp?"
   c) "Did you enjoy being at camp?"
3. All About Myself Scale
   a) "To get along with others"
   b) "To have people like me"
   c) "To stay out of fights"
   d) "To be a leader"
   e) "To have other kids follow my ideas"
   f) "To not get angry when things go wrong"

III. Transfer of Positive Values Back to the Classroom

1. Pre-Camp Questionnaire

a) "Have you ever ridden a horse?"

b) "Are you afraid to ride a horse?"

2. Post-Camp Questionnaire

a) "Did you enjoy being at camp?"

b) "If you could, would you like to go back to camp again?"

c) "Did the students seem more friendly after you came back from camp?"

d) "Are you afraid to ride a horse?"

e) "How did you feel about staying at camp?"

f) "How do you feel about your teacher now?"

g) "Did you enjoy school better after you came back from camp?"

IV. Experiential Data

1. Pre-Camp Questionnaire

a) "Do you belong to Scouts?"

b) "Have you ever gone to a camp before?"

c) "If yes, did you go just during the day?"

-- stay over night at camp?"

d) "Do you and your family ever go camping?"

Sample Population

A random sample of 25 boys and 25 girls from Lincoln School (disadvantaged) and 25 boys and 25 girls from Glann and Larchmont Schools (advantaged) were selected from those students who took both the pre-tests and the post-tests as well as attended the outdoor education program.

Sub-problem 3: To organize and to analyze the data including the aspects of self-reliance, ability to cooperate in a group, and the transfer of positive affective values back to the classroom.

Each test instrument was coded with a four digit number that indicated group (disadvantaged/advantaged), sex (male/female) and the specific individual. A master list of students and their code numbers was established. Each of the three pre-camp tests and the three post-camp tests of each student in the sample population was graded or coded by hand.

The Nowicki-Strickland Locus of Control test was given a score that indicated the number out of the 40 total items that were answered in the external manner. See Appendix B for the external answers to each item. Each All About Myself Scale and the selected items used from the Pre and Post Camp Questionnaires were checked for legibility and completeness before being coded. Each pre-test was coupled with its matching post-test to combine the data for each individual in the sample population.

The analysis of variance technique tests the general null hypothesis of no differences among the means of the various groups tested.

An analysis of variance was calculated for the Nowicki-Strickland Locus of Control Test comparing the initial and final external scores by group (advantaged/disadvantaged), sex (male/female), test (pre-test/post-test), and all combinations of these three factors (group/sex, group/test, sex/test, and group/sex/test).

An analysis of variance was also calculated for the All About Myself Scale. Each subject's nine responses were combined to calculate an individual mean on the pre-camp test and on the post-camp test. These means were also compared by group (advantaged/disadvantaged), sex (male/female), test (pre-test/post-test), and all combinations of these three factors.

A two-way chi-square test was computed for each of the nine items of the All About Myself Scale ("To be a leader", "To work on my own", etcetera) comparing the pre-test with the post-test frequencies in each category (Very Great, Great, Average, Not Too Great, and Somewhat Small) for each of the four groups (advantaged boys, advantaged girls, disadvantaged boys, and disadvantaged girls). The chi-square test was used in this case to test the null hypotheses of no significant difference between or among the responses of the students.

Frequencies and percentages of responses were calculated for each item on the Pre and Post Camp Questionnaires for each of the four groups (advantaged boys, advantaged girls, disadvantaged boys, and disadvantaged girls). The compiled descriptive data were used to formulate comparisons.

The results from the calculations were then related to each item listed within the critical variables of self-reliance, ability to cooperate with others, and the transfer of positive values back to the class-

room. Conclusions were drawn for each of the three critical variables, and implications for further research enumerated.

Summary

The three schools used in this study were selected through their participation in the Toledo, Ohio outdoor education program and by the percentage of children from low income families attending each school. For the purposes of this study, students from Lincoln School were referred to as "economically disadvantaged" and those from Glann and Larchmont Schools as "economically non-disadvantaged" or "advantaged".

The research utilizes a 2 x 2 x 2 design relating tests (pre-test/post-test), sex (male/female), and group (disadvantaged/advantaged). Three paper and pencil test instruments were selected for use in the study. The Nowicki-Strickland Locus of Control was used as a measure of the internal-external psychological dimension for use with children. The All About Myself Scale employs the student's self-evaluation of his abilities in several areas at the time the test is administered. Selected items from the Pre and Post Camp Questionnaires, developed by the Office of Evaluation of the Toledo Public Schools, were used to gather descriptive and quantitative data on the students in the sample population.

A trial run of the testing procedures was conducted at Navarre and Warren Elementary Schools in Toledo. No alterations were made in the tests themselves from the pilot testing, but several procedural suggestions that helped the testing go smoothly were gathered from the classroom teachers and the principals.

The Nowicki-Strickland Locus of Control Test and the All About Myself Scale were administered to each sixth grade class three weeks before the class attended the resident outdoor education program and again two weeks afterward. Similar procedures were used by the Outdoor Education staff of the Toledo Public Schools to administer the pre and post camp questionnaires. Each item on the three tests was considered under one of the three critical variables being studies; self-reliance, ability to cooperate with others, and the transfer of positive values back to the classroom.

A random sample of 25 boys and 25 girls from Lincoln School (disadvantaged) and 25 boys and 25 girls from Glann and Larchmont Schools (advantaged) were selected from those students who took both the pre-tests and the post-tests as well as attended the outdoor education program.

Each test instrument was coded and a master list of students with their code numbers was established. The Nowicki-Strickland Locus of Control test was graded to indicate the number out of the 40 total items that were answered in the external manner. Each All About Myself Scale and the selected items used from the Pre and Post Camp Questionnaires were check for legibility and completeness before being coded for key-punching.

An analysis of variance was calculated for the Nowicki-Strickland Locus of Control tests comparing the initial and final external scores by group (advantaged/disadvantaged), sex (male/female), test (pre-test/post-test) and all combinations of these three factors. An analysis of variance was also calculated for the All About Myself scale. Each

subject's nine responses were combined to calculate an individual mean on the pre-camp test and on the post-camp test. These means were then compared by group, sex, test, and all combinations of these three factors.

A two-way chi-square test was computed for each of the nine items of the All About Myself Scale comparing the pre-test with the post-test frequencies in each category on the rating scale for each of the four groups of students.

Frequencies and percentages of responses were calculated for each item on the Pre and Post Camp Questionnaires for each of the four group of students. The compiled descriptive data were used to formulate comparisons.

The results from the calculations were then related to each item listed within the critical variables of self-reliance, ability to cooperate with others, and the transfer of positive values back to the classroom.

CHAPTER IV

ANALYSIS OF FINDINGS

Lincoln, Glann, and Larchmont elementary schools were selected for this study through their participation in the Toledo, Ohio outdoor education program and by the percentage of children from low income families attending each school. For the purposes of this research, students from Lincoln School were referred to as "economically disadvantaged" and those from Glann and Larchmont Schools as "economically non-disadvantaged" or "advantaged". Although a few students at each school did not attend the resident outdoor education program due to illness, family preference, or other reasons of personal choice, all of the sixth grade students were encouraged to go with their class to the five-day experience at Camp Storer. Table 1 indicates the sample population used in this research and the total population of Lincoln, Glann, and Larchmont students who attended camp.

TABLE 1. SAMPLE POPULATION AND TOTAL POPULATION OF LINCOLN, GLANN, AND LARCHMONT SIXTH GRADE STUDENTS ATTENDING CAMP

School	Sixth Grade Students					
	Boys		Girls		Total	
	Sample	Total	Sample	Total	Sample	Total
Lincoln	25	45	25	52	50	97
Glann-Larchmont	25	51	25	30	50	81
Total	50	96	50	82	100	178

A random sample of 25 boys and 25 girls from Lincoln School and 25 boys and 25 girls from Glann and Larchmont Schools was selected from those students who attended the full five-day resident outdoor education program and took both the pre and post-camp tests. These 100 students in the sample population were randomly selected from the 178 students who attended Camp Storer during those two weeks. There were a surprisingly small number of girls in sixth grade at Glann and Larchmont Schools. This fact caused that sample of 25 out of 30 girls to be the largest percentage of students in the sample from any one cell.

Frequencies and percentages of responses were calculated for each item on the Pre and Post Camp Questionnaires for each of the four groups of students (advantaged boys, advantaged girls, disadvantaged boys, and disadvantaged girls). Table 2 summarizes the responses by percentage to the Pre-Camp Pupil Questionnaire.

As might be expected, more of the advantaged than the disadvantaged children had ridden horses previous to the resident outdoor education experience. During informal conversations with the students from Lincoln School, the researcher learned that many of those inner-city students who had ridden horses prior to camp had done so during a summer visit at a relative's farm or previous to a move to Toledo. Of the four groups of students, the advantaged girls had the highest percentage (24 per cent) who said they were afraid to ride a horse.

The disadvantaged boys responded that they fought at school "sometimes" (68 per cent) more than the other groups of students, with the advantaged girls indicating that they fought the least (12 per cent).

Over half of all the children responded that they didn't belong

TABLE 2. SUMMARY OF RESPONSES BY PERCENTAGE TO PRE-CAMP PUPIL QUESTIONNAIRE FROM SAMPLE POPULATION OF SIXTH GRADE STUDENTS

Question	Students					
	Boys		Girls		Total	
	Adv.	Disad.	Adv.	Disad.	Adv.	Disad.
Have you ridden a horse?						
a. yes	.80	.52	.68	.44	.74	.48
b. no	.20	.48	.32	.56	.26	.52
Are you afraid to ride a horse?						
a. yes	.08	.08	.24	.12	.16	.10
b. no	.92	.92	.76	.88	.84	.90
Do you fight at school?						
a. no	.40	.24	.88	.68	.64	.46
b. sometimes	.52	.68	.12	.28	.32	.48
c. often	.08	.08	.00	.04	.04	.06
Do you belong to:						
a. Boy Scouts	.36	.32	.00	.00	.18	.16
b. Girl Scouts	.04	.00	.44	.16	.24	.08
c. neither one	.60	.68	.56	.84	.58	.76
Have you ever gone to a camp before?						
a. no	.44	.48	.48	.60	.46	.54
b. yes	.56	.52	.52	.40	.54	.46
If yes, did you:						
a. left blank	.48	.48	.40	.56	.44	.52
b. go just during the day	.04	.12	.08	.04	.06	.08
c. stay overnight at camp	.48	.40	.52	.40	.50	.40
Do you and your family ever go camping?						
a. no	.44	.92	.48	.84	.46	.88
b. we camped a couple times	.28	.08	.20	.12	.24	.10
c. we camp a lot	.28	.00	.32	.04	.30	.02

to Scouts. More than two-thirds of the disadvantaged children said they didn't belong to Scouts, perhaps indicating that the Scouting programs in Toledo are more oriented to the middle-class rather than the inner-city child. Whether through a misunderstanding or an effort to be mischievous, 4 per cent of the boys said they belonged to the Girl Scouts.

Except for the disadvantaged girls (only 40 per cent), more than half of the children responded that they had gone to a camp before. This might suggest that there are more camp programs available for the disadvantaged children in the Toledo area than one might suspect. There is a slight discrepancy in the percentage of advantaged boys who responded that they had never gone to a camp before (44 per cent) and those who left the following question on the duration of the camping blank (48 per cent).

A large majority of the children who had been to camp before said that they had stayed overnight at camp rather than staying only during the day. These data indicate that 40 per cent of the disadvantaged children had stayed overnight at a camp before, a surprisingly high number. Slightly more of the advantaged children than the disadvantaged had stayed overnight at a camp. This may suggest that there are more opportunities for these students to attend resident camp programs than day camps or that overnight camping is more appealing to students of this age.

Over half of the advantaged boys (56 per cent) and girls (52 per cent) acknowledged that they had gone camping with their family. In contrast, only 8 per cent of the disadvantaged boys and 16 per cent of

the disadvantaged girls responded that they had gone camping with their family. This may denote, as one might think, that family camping is a more common recreation for the middle class than for the economically disadvantaged. Ninety-two per cent of the disadvantaged boys specified that they did not ever go camping with their family.

Two weeks after the resident outdoor education experience at Camp Storer, students responded to the Post-Camp Pupil Questionnaire. Table 3 summarizes their responses by percentage to that test instrument.

An overwhelming majority of the children (and all of the disadvantaged boys) said they enjoyed being at camp. Similarly, most of the students (from 88 to 96 per cent) answered that they would like to go back again to camp if they could. Most of the children felt they had made new friends at camp. This supports the contention that there are positive social values in a resident outdoor education program. More of the advantaged children felt they made new friends (92 per cent for both boys and girls) than the disadvantaged (72 per cent for boys and 80 per cent for girls).

More of the boys said they fought at camp (20 per cent to 24 per cent) than the girls (only 4 per cent). Yet all the children seemed to fight less at camp than in school. This supports the idea that tensions ease in a camp setting with the smaller groups of students and with a more flexible schedule.

The children's responses were rather evenly divided over the question of other students in class seeming to be more friendly after camp. It would appear that in this instance, the camp experience did not have positive transfer value back to the classroom.

The boys did not feel as if they enjoyed school better after camp. The disadvantaged girls were evenly divided on the question. Only the advantaged girls responded that they did enjoy school more after camp.

TABLE 3. SUMMARY OF RESPONSES BY PERCENTAGE TO POST-CAMP PUPIL QUESTIONNAIRE FROM SAMPLE POPULATION OF SIXTH GRADE STUDENTS

Question	Students					
	Boys		Girls		Total	
	Adv.	Disad.	Adv.	Disad.	Adv.	Disad.
Did you enjoy being at camp?						
a. yes	.96	1.00	.92	.88	.94	.94
b. no	.04	.00	.04	.04	.04	.02
c. ?	.00	.00	.04	.08	.02	.04
If you could, would you like to go back to camp again?						
a. yes	.92	.96	.96	.88	.94	.92
b. no	.04	.00	.04	.12	.04	.06
c. ?	.04	.04	.00	.00	.02	.02
Did you make any new friends at camp?						
a. yes	.92	.72	.92	.80	.92	.76
b. no	.00	.28	.08	.20	.04	.24
c. ?	.08	.00	.00	.00	.04	.00
Did you fight at camp?						
a. yes	.20	.24	.04	.04	.12	.14
b. no	.80	.72	.92	.96	.86	.84
c. ?	.00	.04	.04	.00	.02	.02
Did the students in your class seem more friendly after you came back from camp?						
a. yes	.44	.44	.60	.40	.52	.42
b. no	.44	.48	.40	.56	.42	.52
c. ?	.12	.08	.00	.04	.06	.06
Did you enjoy school better after you came back from camp?						
a. yes	.32	.16	.64	.48	.48	.32
b. no	.68	.76	.36	.48	.52	.62
c. ?	.00	.08	.00	.04	.00	.06
Are you afraid to ride a horse?						
a. yes	.04	.00	.04	.16	.04	.08
b. no	.96	1.00	.92	.84	.94	.92
c. ?	.00	.00	.04	.00	.02	.00
How did you feel about staying at camp?						
a. glad to be there	.24	.08	.36	.20	.30	.14
b. wanted to go home	.04	.08	.00	.08	.02	.08
c. wanted to stay longer	.72	.84	.64	.72	.68	.78
How do you feel about your teacher now?						
a. more of a friend	.04	.20	.36	.20	.20	.20
b. less of a friend	.00	.04	.00	.04	.00	.04
c. about the same	.36	.60	.28	.48	.32	.54
d. no opinion	.60	.16	.36	.28	.48	.22

It would appear by the students' responses that the horseback lesson and riding at camp reduced most of the children's fear of riding horses. The only exception to this was the disadvantaged girls who went from 12 per cent fearing to ride horses before camp to 16 per cent after camp. This is, however, an increase of only one child responding in this category. The advantaged girls made the greatest improvement in easing their fear of riding horses. Before camp 24 per cent responded that they were afraid to ride a horse compared to only 4 per cent after camp.

Homesickness didn't seem to be much of a problem for these children. Most of the students not only said that they were glad to be at camp, but most (72 per cent to 84 per cent) wanted to stay longer.

The camp experience didn't seem to change or improve the relations between the children and their teachers. Most of the children indicated that they felt about the same toward their teachers, or expressed no opinion to this question. The responses may have reflected the fact that some of the classroom teachers did not attend camp due to their own family responsibilities, illness, or personal choice. Students' answers to this question might also have been affected by a concern that their teachers would read their responses although the students had been assured prior to each testing that this would not happen. The classroom teachers were not very involved in the teaching process at camp. These data may point up the fact that the teachers and their students did not interact enough to indicate any change in their relations.

Table 4 summarizes the analysis of variance that was calculated

TABLE 4. ANALYSIS OF VARIANCE FOR THE NOWICKI-STRICKLAND LOCUS OF CONTROL COMPARING GROUPS, SEX, AND TESTS

SOURCE*	SUM OF SQUARES	DEGREES OF FREEDOM	MEAN SQUARE	F-RATIO	LEVEL OF SIGNIFICANCE
1. R(GS)	4183.44	96	43.57	---	---
2. G	462.08	1	462.08	10.6036	.01
3. S	.98	1	.98	.0224	---
4. GS	128.00	1	128.00	2.9372	---
5. RT(GS)	674.08	96	7.02	---	---
6. T	56.18	1	56.18	8.0009	.01
7. GT	11.52	[illegible]	11.52	1.6406	---
8. ST	[illegible]	1	4.50	.6408	---
9. GST	.72	1	.72	.1025	---

* Sources are: G for Groups (Advantaged and Disadvantaged)
S for Sex (Male and Female)
T for Tests (Pre and Post Tests)
R for Error Term (The Number of Subjects in a Given Cell)

for the Nowicki-Strickland Locus of Control test comparing the initial and final external scores by group (advantaged/disadvantaged), sex (male/female), test (pre-test/post-test), and all combinations of these factors (group/sex, group/test, sex/test, and group/sex/test). The analysis of variance is a statistical technique used to test the general null hypothesis of no difference among the means of the various groups tested.

The data in Table 4 indicate that there is a statistically significant difference between the disadvantaged and the advantaged children in their level of externality with regard to locus of control. There is also a significant difference between the pre-test scores and the post-tests for all the children, denoting that the outdoor education experience did make a significant difference in the responses of the children. These are judged by the researcher to be the most important findings in this study. The other comparisons (sex, group/sex, group/test, sex/tests, and group/sex/test) showed no significant difference.

The Nowicki-Strickland Locus of Control test was graded on a score of externality, that is, the number of questions on the test that were answered in the external manner. See Appendix B for the test instrument and the external answers. Group means were used in the comparisons, not individual scores, to better illustrate changes in the groups of students than changes in the individual students. Group means were calculated for the advantaged boys, the advantaged girls, the disadvantaged boys and the disadvantaged girls. The data in Table 5 present group means for externality on the Nowicki-Strickland Locus of Control test.

TABLE 5. GROUP MEANS FOR EXTERNALITY ON THE NOWICKI-STRICKLAND LOCUS OF CONTROL TEST

GROUP	PRE-TEST	POST-TEST	DIFFERENCE
Disadvantaged			
Boys	18.68	18.52	.16
Girls	17.64	16.64	1.00
Total	18.16	17.58	.58
Advantaged			
Boys	14.64	13.28	1.36
Girls	16.56	14.84	1.72
Total	15.60	14.06	1.54
Total	16.88	15.80	1.08

The group means in Table 5 verify that all four groups of students became less external, that is, more internal between the time of the pre-test three weeks before camp and the post-test two weeks after the outdoor education experience. The advantaged girls showed the greatest difference between pre-test scores and post-test scores (1.72) while the disadvantaged boys indicated the least difference (.16).

Figure 2 graphically illustrates this comparison of group means for externality on the Nowicki-Strickland Locus of Control test.

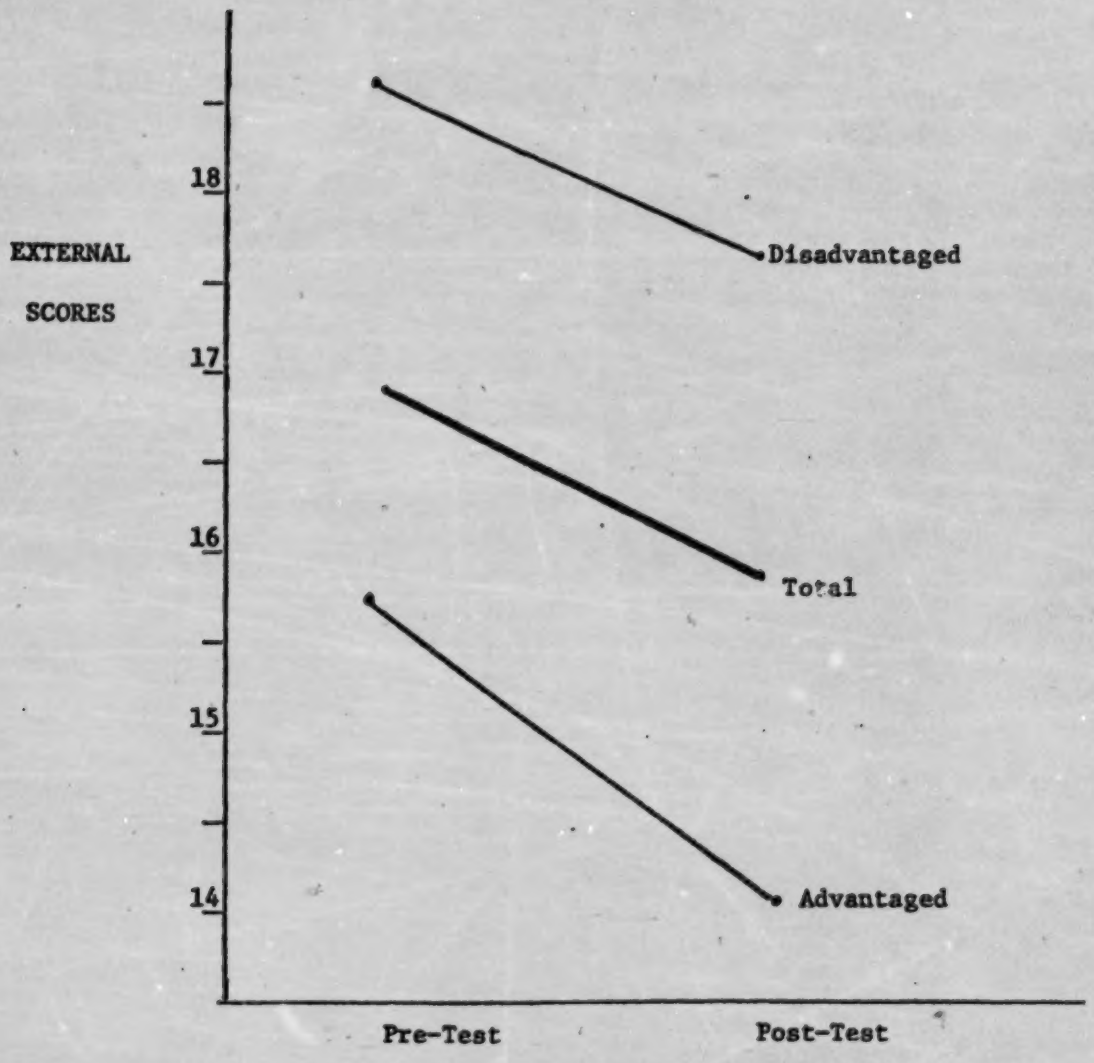

Figure 2. Comparison of Group Means for Externality on the Nowicki-Strickland Locus of Control Test

Figure 2 indicates that the disadvantaged students have a more external locus of control than the advantaged students in this study. After the outdoor education experience, the disadvantaged students achieved about the level of externality that the total group of students had at the beginning of the testing.

The All About Myself Scale was used to elicit a form of student self-evaluation of his abilities in several areas at the times the test was administered. The scale for the All About Myself Scale went from a score of one for "somewhat small" to five for "very great . See Appendix C for this test instrument. A median score was computed for each student for his pre-test and post-test on the All About Myself Scale. Scores were then computed for each of the four groups of students (disadvantaged boys, disadvantaged girls, advantaged boys, and advantaged girls). Table 6 shows the analysis of variance for the All About Myself Scale comparing the groups of students, sex, and tests. This is the same technique that was used with the scores from the Nowicki-Strickland Locus of Control test.

The statistical analysis of variance for the All About Myself Scale indicates that there is no significant difference between any of the comparisons (group, sex, tests, group/sex, group/test, sex/test, and group/sex/test). It is interesting to note, however, that the two factors that were significant on the Locus of Control analysis (group and test) were also the highest on the All About Myself Scale. This may indicate that while the Nowicki-Strickland Locus of Control Scale is a more sensitive instrument, both the Locus of Control Scale and the All About Myself Scale are measuring the same affective factors.

While the data for Table 6 were computed using median scores, a similar analysis of variance was computed utilizing mean scores as a comparison. There was no significant difference found using these data either.

TABLE 6. ANALYSIS OF VARIANCE FOR THE ALL ABOUT MYSELF SCALE COMPARING GROUPS, SEX, AND TESTS

SOURCE*	SUM OF SQUARES	DEGREES OF FREEDOM	MEAN SQUARE	F-RATIO	LEVEL OF SIGNIFICANCE
1. R(GS)	56.6515	96	.6110	--	--
2. G	1.6854	1	1.6854	2.7854	--
3. S	.0158	1	.0151	.0247	--
4. GS	.0255	1	.0255	.0417	--
5. RT(GS)	21.1313	96	.2201	--	--
6. T	.5725	1	.5725	2.6010	--
7. GT	.0585	1	.0585	.2657	--
8. ST	.0192	1	.0192	.0872	--
9. GST	.2100	1	.2100	.9541	--

* Sources are: G for Groups (Advantaged and Disadvantaged)
S for Sex (Male and Female)
T for Tests (Pre and Post Tests)
R for Error Term (The Number of Subjects in a Given Cell)

The responses for each individual on the All About Myself Scale were averaged to obtain a pre-test and a post-test score. Group means were then calculated for each of the four groups of students (disadvantaged boys, disadvantaged girls, advantaged boys, and advantaged girls). Higher scores reflect the student's response toward feeling more ability or more confidence in himself in each of the nine areas covered in the questions. Table 7 summarizes the group means for the All About Myself Scale.

TABLE 7. SUMMARY OF GROUP MEANS FOR THE ALL ABOUT MYSELF SCALE

GROUP	PRE-TEST	POST-TEST	DIFFERENCE
Disadvantaged			
Boys	3.6400	3.7972	+.1572
Girls	3.7192	3.7076	-.0116
Total	3.6796	3.7524	+.0728
Advantaged			
Boys	3.4644	3.6456	+.1812
Girls	3.4592	3.6456	+.1864
Total	3.4618	3.6030	+.1412
Total	3.5707	3.6777	+.1070

The data in Table 7 indicate that three of the four groups of students had a higher group mean on the post-test than on the pre-test. The disadvantaged girls were the only exception with slightly lower scores on the post-test. The data on the disadvantaged students reflect higher group means on both the pre-test and the post-test than the advantaged students. The advantaged students, however, showed a greater difference between their pre-test and post-test scores (.1412) than the disadvantaged students (.0728).

Responses on the All About Myself Scale were examined item by item (from "To be a leader" . . . to . . . "To not get angry when things go wrong") for each of the four groups of students comparing their pre-tests and their post-tests. Chi-square values were calculated from two-way contingency tables for each of the nine items for the four groups of students to see if any trend or relationship could be ascertained from the data. Calculations revealed that there was no significant difference on any of the responses for any of these 36 chi-square values. This means that the responses the children gave could have occurred by chance and that there is no trend or relationship evidenced in this data between the items on the Scale and the students answering each item.

These findings can now be related back to the three critical variables of self-reliance, ability to cooperate with others, and the transfer of positive values back to the classroom. The experiential data have previously been explored and discussed. The word "positive", "negative", "neutral", or "mixed" will be listed after each item to denote a generalized summary of the findings. These will then be summarized to form some general conclusions on each critical variable.

Critical Variables Analyzed

I. Self-Reliance	
1. Nowicki-Strickland Locus of Control	POSITIVE
2. All About Myself Scale	
a) "To feel sure of myself"	NEUTRAL
b) "To work on my own"	NEUTRAL
c) "To have fun by myself"	NEUTRAL
II. Ability to Cooperate with Others	
1. Pre-Camp Questionnaire, item: "Do you fight at school?"	MIXED
2. Post-Camp Questionnaire	
a) "Did you fight at camp?"	POSITIVE*
b) "Did you make new friends at camp?"	POSITIVE
c) "Did you enjoy being at camp?"	POSITIVE
3. All About Myself Scale	
a) "To get along with others"	NEUTRAL
b) "To have people like me"	NEUTRAL
c) "To stay out of fights"	NEUTRAL
d) "To be a leader"	NEUTRAL
e) "To have other kids follow my ideas"	NEUTRAL
f) "To not get angry when things go wrong"	NEUTRAL
III. Transfer of Positive Values Back to the Classroom	
1. Pre-Camp Questionnaire	
a) "Have you ever ridden a horse?"	MIXED
b) "Are you afraid to ride a horse?"	POSITIVE*

2. Post-Camp Questionnaire

a) "Did you enjoy being at camp?"	POSITIVE
b) "If you could, would you like to go back to camp again?"	POSITIVE
c) "Did the students seem more friendly after you came back from camp?"	MIXED
d) "Are you afraid to ride a horse?"	POSITIVE*
e) "How did you feel about staying at camp?"	POSITIVE
f) "How do you feel about your teacher now?"	NEUTRAL
g) "Did you enjoy school better after you came back from camp?"	MIXED

To avoid confusion in semantics, it should be pointed out that the statements marked POSITIVE which are denoted with an asterisk connote a positive improvement for the students in that area, not necessarily a positive answer to that particular question.

The resident outdoor education program did have a positive effect on the self-reliance and self-confidence of the students as evidenced by the findings of the Nowicki-Strickland Locus of Control test. The students seemed moderately improved in their ability to better cooperate with others after their five days at the camp. The most notable item in this variable was the youngsters' hearty pleasure in attending Camp Storer. It appeared that there was only moderate transfer of positive values back to the classroom after the outdoor education experience. This may have been due to a lack of thorough enough follow-up on camp ideas and changes in the students on the part of the classroom teacher

or the outdoor education staff. Additional time, money, training, and planned activities back in the classroom may be needed to better accomplish this particular goal.

CHAPTER V

SUMMARY OF THE STUDY

Introduction

This research analyzed the differences in self-reliance, ability to cooperate in a group, and the transfer of positive values back to the classroom between economically disadvantaged and non-disadvantaged sixth grade students attending the five-day resident outdoor education program of the Toledo Public Schools during the spring of 1973.

The problem was divided into three sub-problems:

Sub-problem 1: To isolate a population of disadvantaged and non-disadvantaged sixth graders attending the five-day resident outdoor education program of the Toledo Public Schools.

Sub-problem 2: To determine differences in outcomes between disadvantaged and non-disadvantaged students who attend the resident outdoor education program of the Toledo Public Schools with regard to self-reliance, ability to cooperate in a group, and the transfer of positive affective values back to the classroom.

Sub-problem 3: To organize and to analyze the data including the aspects of self-reliance, ability to cooperate in a group, and the transfer of positive affective values back to the classroom.

Literature

The review of literature related to content included information on compensatory education, selected aspects of economically disadvantaged children, and outdoor education. Compensatory education is

necessary to help raise the inner-city and disadvantaged youth to the levels of achievement of suburban students. These costly programs are also needed to improve the lower self-image and lower motivation levels of disadvantaged children. Outdoor education, with its emphasis on concrete learning experiences in the natural environment, is viewed as a particularly successful method of improving educational processes for such students.

The literature reviewed related to method included studies which evaluated self-concept and locus of control in youth in camp settings. Each of the five research studies reviewed in this area indicated a significant positive self-concept emerging in students after their stay at camp. Locus of control in children is related to parents and teachers affecting a child, as well as sex, race, and social class. Two studies using the locus of control test instrument utilized in this study concluded that the educationally oriented camp experience aided students to improve their self-respect and self-concept.

Procedures

The three schools used in this study were selected through their participation in the Toledo, Ohio outdoor education program and by the percentage of children from low income families attending each school. For the purposes of this study, students from Lincoln School were referred to as "economically disadvantaged" and those from Glann and Larchmont Schools as "economically non-disadvantaged" or "advantaged".

The research utilized a 2 x 2 x 2 design relating tests (pre-test/post-test), sex (male/female), and group (disadvantaged/advantaged).

Three paper and pencil test instruments were selected for use in the study. The Nowicki-Strickland Locus of Control was used as a measure of the internal-external psychological dimension for use with children. The All About Myself Scale employed the student's self-evaluation of his abilities in several areas at the time the test was administered. Selected items from the Pre and Post Camp Questionnaires, developed by the Office of Evaluation of the Toledo Public Schools, were used to gather descriptive and quantitative data on the students in the sample population.

A trial run of the testing procedures was conducted at Navarre and Warren Elementary Schools in Toledo. No alterations were made in the tests themselves from the pilot testing, but several procedural suggestions that helped the testing go smoothly were gathered from the classroom teachers and the principals.

The Nowicki-Strickland Locus of Control Test and the All About Myself Scale were administered to each sixth grade class three weeks before the class attended the resident outdoor education program and again two weeks afterward. Similar procedures were used by the Outdoor Education staff of the Toledo Public Schools to administer the pre and post camp questionnaires. Each item on the three tests was considered under one of the three critical variables being studied; self-reliance, ability to cooperate with others, and the transfer of positive values back to the classroom.

A random sample of 25 boys and 25 girls from Lincoln School (disadvantaged) and 25 boys and 25 girls from Glann and Larchmont Schools (advantaged) were selected from those students who took both the

pre-tests and the post-tests as well as attended the outdoor education program.

Each test instrument was coded and a master list of students with their code numbers was established. The Nowicki-Strickland Locus of Control test was graded to indicate the number out of the 40 total items that were answered in the external manner. Each All About Myself Scale and the selected items used from the Pre and Post Camp Questionnaires were checked for legibility and completeness before being coded for key-punching.

An analysis of variance was calculated for the Nowicki-Strickland Locus of Control tests comparing the initial and final external scores by group (advantaged/disadvantaged), sex (male/female), test (pre-test/post-test), and all combinations of these three factors. An analysis of variance was also calculated for the All About Myself Scale. Each subject's nine responses were combined to calculate an individual mean on the pre-camp test and on the post-camp test. These means were then compared by group, sex, test, and all combinations of these three factors.

A two-way chi-square test was computed for each of the nine items of the All About Myself Scale comparing the pre-test with the post-test frequencies in each category on the rating scale for each of the four groups of students.

Frequencies and percentages of responses were calculated for each item on the Pre and Post Camp Questionnaires for each of the four groups of students. The compiled descriptive data were used to formulate comparisons.

The results from the calculations were then related to each item listed within the critical variables of self-reliance, ability to cooperate with others, and the transfer of positive values back to the classroom.

Findings

1. More than half the children responded that they had gone to a camp before, and a large majority of those children had stayed overnight at camp rather than staying only during the day.
2. Over half of the advantaged children noted that they had gone camping with their families whereas only a small percentage of the disadvantaged children had done so.
3. Ninety-four per cent of the children said they enjoyed being at camp, and most of the students felt they would like to go back to camp again if they could.
4. All of the children seemed to fight less at camp than in school. This supports the idea that tensions ease in a camp setting with smaller groups of children and a more flexible schedule.
5. The children were rather evenly divided over the question of other students in class seeming to be more friendly after camp. Also, 72 per cent of the boys did not feel as if they enjoyed school better after camp.
6. Eighty-six per cent of the boys and 70 per cent of the girls responded that they felt about the same toward their classroom teacher or had no opinion on their feelings toward the teacher after the outdoor education experience.

7. There was a significant difference at the .01 level between the disadvantaged and the advantaged children in their level of externality with regard to locus of control, with the disadvantaged children reaching about the level of externality after camp that the advantaged students had before the outdoor education experience.

8. There was a significant difference at the .01 level between the pre-test scores and the post-test scores for all the children, suggesting that the outdoor education experience did make a significant difference in the locus of control for these children. The advantaged girls showed the greatest difference between pre-test and post-test scores (1.72) while the disadvantaged boys indicated the least difference (.16).

9. The All About Myself Scale, used to elicit a form of student self-evaluation of his abilities in several areas at the time the test was administered, indicated no significant differences between any of the comparisons made (group, sex, tests, group/sex, group/test, sex/test, or group/sex/test).

10. Calculations for chi-square values indicated that there were no significant differences on any of the nine items of the All About Myself Scale for the four groups of students (advantaged boys, advantaged girls, disadvantaged boys, or disadvantaged girls).

Conclusions

From these findings, the following conclusions can be drawn:

1. Although the economically disadvantaged students have a more external locus of control (a feeling that their lives are dictated by luck or fate) than do suburban non-disadvantaged students, the five-day resident

outdoor education program did make a significant effect toward causing both groups of children to become more self-reliant and self-confident.

2. The students seemed moderately improved in their ability to better cooperate with others after their five days at the camp.

3. There was only moderate transfer of positive values back to the classroom after the outdoor education experience.

4. The contention of positive social values of the resident outdoor education experience is supported by the fact that the vast majority of students liked camp, wanted to return, wished that they could stay longer, and felt that they had made new friends there.

5. The Nowicki-Strickland Locus of Control test appears to be a more valuable and sensitive instrument than either the All About Myself Scale or the Pre and Post Camp Pupil Questionnaires. Better affective measures are needed suitable for intermediate grade level children attending an outdoor education program.

Implementations

The following implementations are based on the findings and conclusions of this study:

1. The Disadvantaged Pupils Public Funds are serving a positive educational purpose in the Toledo Outdoor Education program. The results of this research should encourage the Toledo Board of Education to continue and to expand their outdoor education program for their students.

2. Administrators and teachers should be made more aware of the findings of this study to help improve the transfer of positive affective values back to the classroom.

3. Because the Toledo Outdoor Education program had positive affective advantages for both male and female, economically advantaged and disadvantaged students, a similar program could well be implemented in other large urban areas.

Recommendations

Any research seems to leave more questions unanswered than those answered. The findings and conclusions of this study point toward needed research to follow what has been done here. Listed below are some of the recommendation and possible avenues of inquiry opened by this study.

1. Will these changes last? Similar tests need to be administered in a sequence of time after the outdoor education experience, perhaps two months, six months, or even a year after the camp program.
2. How would these students compare to a matched group of children who did not attend such an outdoor education program? In some school systems there might be a population of students of similar age, grade level, and economic background that could be used as a control group of students in a somewhat similar research design.
3. Are there advantages to mixing economically disadvantaged and advantaged children together in the same camping session? A comparison of students in an outdoor education program with representation from heterogeneous economic background to a camp with students of homogeneous economic background would add a new dimension to this study. In some areas federal, regional, and local school authorities are encouraging this type of mixing of students as a method of improving learning for the poorer inner-city child and of aiding race relations.

4. Would similar results be obtained from a day camp program rather than a resident outdoor education program? If similar changes could be achieved, the day camp system might be able to work with larger numbers of children at a lower cost per child for the school system.

5. Are these effects more pronounced and longer-lasting if the camp experience is extended to more than five school days at one time, or to two resident sessions for each child? It may be worthwhile for a school system to invest a greater amount of time and money in certain students who would benefit most from a resident outdoor education program.

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APPENDICES

APPENDIX A

**Application for Federal Assistance
For the Education of Children
From Low-Income Families
Fiscal Year 1973**

pp. 73-75 deleted because of illegibility

APPENDIX B

The Nowicki-Strickland Locus of Control Scale

School: _____ Your Name: _____

Circle One: Boy Girl

THE NOWICKI-STRICKLAND LOCUS OF CONTROL SCALE
(Personal Reaction Survey)

Yes	No	
* x		1. Do you believe that most problems will solve themselves if you just don't fool with them?
	x	2. Do you believe that you can stop yourself from catching a cold?
x		3. Are some kids just born lucky?
	x	4. Most of the time do you feel that getting good grades means a great deal to you?
x		5. Are you often blamed for things that just aren't your fault?
	x	6. Do you believe that if somebody studies hard enough he or she can pass any subject?
x		7. Do you feel that most of the time it doesn't pay to try hard because things never turn out right anyway?
x		8. Do you feel that if things start out well in the morning that it's going to be a good day no matter what you do?
	x	9. Do you feel that most of the time parents listen to what their children have to say?
x		10. Do you believe that wishing can make good things happen?
x		11. When you get punished does it usually seem it is for no good reason at all?
x		12. Most of the time do you find it hard to change a friend's (mind) opinion?
	x	13. Do you think that cheering more than luck helps a team to win?
x		14. Do you feel that it's nearly impossible to change your parent's mind about anything?
	x	15. Do you believe that your parents should allow you to make most of your own decisions?
x		16. Do you feel that when you do something wrong there's very little you can do to make it right?

* Answers indicate the external response.

Yes	No	
x		17. Do you believe that most kids are just born good at sports?
x		18. Are most of the other kids your age stronger than you are?
x		19. Do you feel that one of the best ways to handle most problems is just not to think about them?
	x	20. Do you feel that you have a lot of choice in deciding who your friends are?
x		21. If you find a four leaf clover do you believe that it might bring you good luck?
	x	22. Do you often feel that whether you do your homework has much to do with what kind of grades you get?
x		23. Do you [illegible]that when a kid your age decides to hit you, there's [illegible]le you can do to stop him or her?
x		24. Have you ever had a good luck charm?
	x	25. Do you believe that whether or not people like you depends on how you act?
	x	26. Will your parents usually help you if you ask them to?
x		27. Have you felt that when people were mean to you it was usually for no reason at all?
	x	28. Most of the time, do you feel that you can change what might happen tomorrow by what you do today?
x		29. Do you believe that when bad things are going to happen they just are going to happen no matter what you try to do to stop them?
	x	30. Do you think that kids can get their own way if they just keep trying?
x		31. Most of the time do you find it useless to try to get your own way at home?
	x	32. Do you feel that when good things happen, they happen because of hard work?
x		33. Do you feel that when somebody your age wants to be your enemy there's little you can do to change matters?

Yes	No	
____	x	34. Do you feel that it's easy to get friends to do what you want them to?
x	____	35. Do you usually feel that you have little to say about what you get to eat at home?
x	____	36. Do you feel that when someone doesn't like you there's little you can do about it?
x	____	37. Do you usually feel that it's almost useless to try in school because most other children are just plain smarter than you are?
____	x	38. Are you the kind of person who believes that planning ahead makes things turn out better?
x	____	39. Most of the time, do you feel that you have little to say about what your family decides to do?
____	x	40. Do you think it's better to be smart than to be lucky?

APPENDIX C

All About Myself Scale

ALL ABOUT MYSELF SCALE *

DIRECTIONS: Below are some things you are being asked to tell about yourself. For each item, circle one of the numbers (1-5) to the right that best describes what your ability is NOW.

EXAMPLE

	My Ability Now Is				
	Very Great	Great	Average	Not Too Great	Somewhat small
A. To play baseball	5	4	3	(2)	1

This pupil felt that now his ability to play baseball was not too great, so he circled (2) not too great.

* From: Evaluation of the Camp Project for Seventh, Eighth, and Ninth Graders, Atlanta Public Schools, Atlanta, Georgia, Research and Development Report, Vol. 5, No. 4, Summer 1971.

ALL ABOUT MYSELF SCALE

Date: _____

(Please Print Name Clearly)

Name: _____ (Circle One)

Name of School: _____ Boy Girl

	My Ability NOW is				
	Very Great	Great	Average	Not Too Great	Some-what Small
B. To be a leader	5	4	3	2	1
C. To work on my own	5	4	3	2	1
D. To get along with others . .	5	4	3	2	1
E. To have people like me . . .	5	4	3	2	1
F. To stay out of fights . . .	5	4	3	2	1
G. To have other kids follow my ideas	5	4	3	2	1
H. To feel sure of myself . . .	5	4	3	2	1
I. To have fun by myself . . .	5	4	3	2	1
J. To NOT get angry when things go wrong	5	4	3	2	1

APPENDIX D

Pre and Post Camp Questionnaires

Note: * indicates items used in this study.

TOLEDO OUTDOOR EDUCATION PROGRAM
1972-1973

PUPIL QUESTIONNAIRE
(To be given after camp)

This is not a test. You won't be graded. We just want to know what you think. Thanks for your help!

School _____ Check one: Boy_____ Girl____

Directions: Please circle the best answer.

yes	no	?	*1.	Did you enjoy being at camp?
yes	no	?	*2.	If you could, would you like to go back to camp again?
yes	no	?	*3.	Did you make any new friends at camp?
yes	no	?	*4.	Did you fight at camp?
yes	no	?	5.	Did the camp counselors help you often?
yes	no	?	6.	Were the class instructors at camp helpful to you?
yes	no	?	7.	Was your teacher helpful to you at camp?
yes	no	?	*8.	Did the students in your class seem more friendly after y me back from camp?
yes	no	?	9.	Did your classroom teacher seem more friendly after you came back from camp?
yes	no	?	*10.	Did you enjoy school better after you came back from camp?
yes	no	?	*11.	Are you afraid to ride a horse?
yes	no	?	12.	Is a toad a land animal?
yes	no	?	13.	Are all snakes poisonous?
yes	no	?	14.	Does a horse have moods (happy, sad, gets angry)?

15. What is orienteering? (Check one)

_____ a) tying knots
_____ b) outdoor cooking at camp
_____ c) setting up a tent
_____ d) finding your way with map and compass

16. When you are walking, about what distance do you cover with each step?

_____ a) ten feet
_____ b) eight feet
_____ c) two feet
_____ d) six inches

17. Fill in the blanks in this food chain. Choose from these words:

a) mushrooms
b) plants
c) rabbits
d) hawks
e) water

1)_____, 2) insects, 3) frogs, 4) snakes, 5)_____

18. When you are close to a horse, you should: (Check one)

_____ a) walk behind a horse
_____ b) shout and laugh with your friends
_____ c) talk in a normal voice
_____ d) run toward a horse

19. What do all green plants need to live? (Check the four best answers.)

_____ a) insects
_____ b) oxygen
_____ c) carbon dioxide
_____ d) animals
_____ e) light
_____ f) darkness
_____ g) water
_____ h) people

Count again. Be sure there are only four checked.

20. Photosynthesis is the process by which plants make: (Check one)

_____ a) light
_____ b) noise
_____ c) food
_____ d) chlorophyll

21. You should give artificial respiration to: (Check one)

_____ a) stop bleeding
_____ b) someone with a broken arm
_____ c) someone with a toothache
_____ d) someone who couldn't breathe

*22. How did you feel about staying at camp? (Check one)

_____ a) glad to be there
_____ b) wanted to go home
_____ c) wanted to stay longer

23. The food was: (Check one)

_____ a) very good
_____ b) O.K.
_____ c) bad

24. The sleeping cabins were: (Check one)

_____ a) very good
_____ b) O.K.
_____ c) bad

*25. How do you feel about your teacher now?

_____ a) more of a friend
_____ b) less of a friend
_____ c) about the same
_____ d) no opinion

Are there other ideas you want us to know?

_____

_____

_____

Note: * indicates items used in this study

TOLEDO OUTDOOR EDUCATION PROGRAM
1973-1973

PUPIL QUESTIONNAIRE
(To be given before camp)

This is not a test. You won't be graded. We just want to know what you think. Thanks for your help!

School_____ Check one: Boy_____
Girl_____

1. What is orienteering? (Check one)

_____ a) setting up a tent
_____ b) tying knots
_____ c) finding your way with map and compass
_____ d) outdoor cooking at camp

2. When you are walking, about what distance do you cover with each step?

_____ a) ten feet
_____ b) two feet
_____ c) eight feet
_____ d) six inches

3. Is a garter snake poisonous? (Check one)

_____ yes
_____ no

4. Is a toad a land or a water animal? (Check one)

_____ land animal
_____ water animal

5. Fill in the blanks on this food chain. Choose from these words:

a) mushrooms
b) hawks
c) water
d) plants
e) rabbits

1) _____, 2) insects, 3) frogs, 4) snakes, 5) _____

*6. Have you ever ridden a horse?

_____ yes
_____ no

*7. Are you afraid to ride a horse?

_____ yes
_____ no

8. When you are close to a horse, you should: (Check one)

_____ a) talk in a normal voice
_____ b) walk behind a horse
_____ c) shout and laugh with your friends
_____ d) run toward the horse

9. Does a horse have <u>moods</u> (happy, sad, gets angry)? (Check one)

_____ yes
_____ no
_____ don't know

10. What things do all green plants need to live? (Check the <u>four</u> best answers)

_____ insects
_____ oxygen
_____ carbon dioxide
_____ animals
_____ light
_____ darkness
_____ water
_____ people Count again. Be sure there are only <u>four</u> checked.

11. What would you do when you see a spider? (Check one)

_____ a) smash it
_____ b) run away
_____ c) look at it
_____ d) take it home

12. <u>Photosynthesis</u> is the process by which plants make: (Check one)

_____ a) light
_____ b) noise
_____ c) food
_____ d) chlorophyll

13. You would give artificial respiration to:

_____ a) stop bleeding
_____ b) someone who couldn't breathe
_____ c) someone with a broken arm
_____ d) someone with a toothache

*14. Do you fight at school?

_____ no
_____ sometimes
_____ often

*15. Do you belong to:

_____ a) Boy Scouts
_____ b) Girl Scouts
_____ c) neither one

*16. Have you ever gone to a camp before?

_____ no
_____ yes

If yes, did you:

a) go just during the day _____
b) stay overnight at camp _____

*17. Do you and your family ever go camping?

_____ no
_____ we have camped a couple times
_____ we camp a lot

Comments:

_____

_____

_____

APPENDIX E

Letter of Support From the Director of the Toledo Outdoor Education Program

TOLEDO PUBLIC SCHOOLS
MANHATTAN AND ELM
TOLEDO, OHIO 43608

February 1, 1973

Mrs. Sarah Fletcher
6635 W. Bancroft
Apt. 149-S
Toledo, Ohio 43615

Dear Sarah,

We are pleased to know of your intention to do your doctoral dissertation on the Outdoor Educa[illegible] Program for the Toledo Public Schools.

We feel that your study will benefit our program and help us to better understand the many positive attributes we feel students gain from this unique experience.

Let us know if we can be of help to you in your work.

Sincerely,

Burt Spice
Director
Outdoor Education

BS:mt

VITA

The author was born in Vinton, Iowa on September 30, 1942. In 1964 she received the Bachelor of Science degree in elementary education from the University of Wisconsin, and taught fourth grade in a suburb of Baltimore the following year. In 1966 she received the Master of Science degree in Recreation from Indiana University. She held the position of assistant professor at Clemson University in Clemson, South Carolina in the Department of Recreation and Park Administration from 1969 to 1972 and returned there after a year in Toledo, Ohio. The degree of Doctor of Recreation, with a major in recreation and a minor in outdoor education and natural sciences was granted by Indiana University in 1973. At Indiana University the author was a graduate assistant, teaching associate, and research assistant in the Department of Recreation and Park Administration.